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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2010*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
     closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,6-8 and 11-17* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,6-8 and 11-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some *   c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   Receipt of Applicant's Amendment, filed on 08/05/2010, is acknowledged. The amendment includes the amending of claims 1, 6-8, and 11, and the cancellation of claims 2-3, and 18.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.   Independent claim 7 is directed towards a viewer program. However, all of the elements claimed could be reasonably interpreted by an ordinary artisan as being software alone, and thus is directed to software per se, which is non-statutory.

In order for such a software claim to be statutory, it must be claimed in combination with an appropriate medium and/or hardware such as a memory or processor to establish a statutory category of invention and enable any functionality to realized.

Specifically, there is no explicit limitation in the body of independent claim 7 that states that the viewer program is stored and executed on an appropriate medium. Rather, all that is stated is that the viewer program causes a computer to perform operations. Moreover, the claimed computer in the preamble of the independent claim is insufficient as it is merely used in attempt at intended use.

Claim 16 is rejected for incorporating the deficiencies of independent claim 7.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1, 4, 6-8, 11, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hyon** (U.S. PGPUB 2002/0077135) in view of **Baker** (U.S. Patent 6,546,417), and further in view of **Ostermann et al.** (U.S. Patent 6,990,452).

7.   Regarding claim 1, **Hyon** teaches a display device comprising:

A) a first storage portion for storing a character code for specifying said predetermined kind of character, and character shape data corresponding to said character code in a correlated manager (Paragraphs 23, and 41-42, Figure 4);

B) a second storage portion for storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user (Paragraphs 23, 25, and 44, Figure 2);

C) a display output portion for outputting said predetermined kind of character and said registered image (Paragraph 21, Figure 2);

D) a display control portion for causing said display output portion to output corresponding said predetermined king of character and said registered image (Paragraphs 21 and 41-42);

E) wherein at least one predetermined kind of character is to be displayed directly adjacent to said registered image in accordance with display data containing said character code, text attribute data, and said image code (Paragraphs 21 and 41-42).

The examiner notes that **Hyon** teaches **"a first storage portion for storing a character code for specifying said predetermined kind of character, and character shape data corresponding to said character code in a correlated manager"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons"

(Paragraph 23) and "the user can input a text including typical characters, specical characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41). The examiner further notes that **Hyon** teaches **"a second storage portion for storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23), "storage 18 stores oriental or occidental emoticons according to the cultural area of a user" (Paragraph 25), and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that **Hyon** teaches **"a display output portion for outputting said predetermined kind of character and said registered image"** as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21). The examiner further notes that **Hyon** teaches

"a display control portion for causing said display output portion to output corresponding said predetermined king of character and said registered image" as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon…the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that **Hyon** teaches **"wherein at least one predetermined kind of character is to be displayed directly adjacent to said registered image in accordance with** display data containing said character code, text attribute data, and said image code" as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon…the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

      Hyon does not explicitly teach:

F) said text attribute data <u>including a size mark to be added to each said at least one directly adjacent character</u>;

G) said display control portion determined whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same;

H) when the size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the registered image are not substantially the same, said display control portion makes the size of the <u>at least one directly adjacent character</u> and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data;

J) said display control portions causes said display output portion to display a text containing <u>said at least one directly adjacent character and the registered image scaled to substantially the same size</u>.

Baker, however, teaches **"said text attribute data <u>including a size mark to be added to each said at least one directly adjacent character</u>"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), **"said display control portion determined whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), **"when the size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the registered image are not substantially the same, said display control portion makes the size of the <u>at least</u>**

one directly adjacent character and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data" as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), and **"said display control portions causes said display output portion to display a text containing said at least one directly adjacent character and the registered image scaled to substantially the same size"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker's** would have allowed **Hyon's** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Hyon and **Baker** do not explicitly teach:

F) said text attribute data including a style mark to be added to each said at least one directly adjacent character;

I) said display control portion modifies said registered image to include image data for a mark resembling said style make attribute data of said at least one directly adjacent character;

J) and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character.

Ostermann, however, teaches **"said text attribute data including a style mark to be added to each said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes

predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), **"said display control portion <u>modifies said registered image to include image data for a mark resembling said style make attribute data of said at least one directly adjacent character</u>"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a

text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), and **"and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a

winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61).

The examiner further notes that Figure 6 of **Ostermann** displays a selectable area 96 for users to insert emoticons directly via a mouse into a currently typed message. Moreover, **Ostermann** explicitly states that the style markings of an adjacent character are applied to an emoticon (See "the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 4, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein when said registered is a gray image, said display control portion converts each pixel of said registered image into a color made by mixing the fore color and a back color of said text at a ratio according to a pixel value of said predetermined kind of character.

Ostermann, however, teaches **"wherein when said registered is a gray image, said display control portion converts each pixel of said registered image into a color made by mixing the fore color and a back color of said text at a ratio according to a pixel value of said predetermined kind of character"** as "The increased intensity of the emoticon may be accomplished by changing the icon from black-on-white background to black-on-colored background (such as red or yellow) where the intensity of the background color reflects the amplitude" (Column 9, lines 43-67) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color" (Column 11, lines 43-50)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 5, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein said text attribute data contains decoration attribute data indicating a type of a decoration applied to a corresponding predetermined kind of character; and

B) said display control portion decorates said registered image according to said decoration attribute data.

Ostermann, however, teaches **"wherein said text attribute data contains decoration attribute data indicating a type of a decoration applied to a corresponding predetermined kind of character"** as "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means...In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emoticon and presenting the chosen duration of the emoticon" (Column 11, lines 43-61) and **"said display control portion decorates said registered image according to said decoration attribute data"** as "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means...In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emoticon and presenting the chosen duration of the emoticon" (Column 11, lines 43-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 6, **Hyon** teaches a display method comprising:
A) storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user (Paragraphs 23, 25, and 44, Figure 2);

B) said registered image stored in a storage portion different from a storage portion of storing the predetermined kind of character (Paragraphs 23 and 44);

C) at least one predetermined kind of character that is to be displayed directly adjacent to said registered image with respect to display data containing a character code, text attribute data, and said image code (Paragraphs 21 and 41-42);

F) displaying said predetermined kind of character and said registered image simultaneously based on said transformed registered image (Paragraphs 21 and 41-42);

The examiner notes that **Hyon** teaches **"storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23), "storage 18 stores oriental or occidental emoticons according to the cultural area of a user" (Paragraph 25), and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see

cited reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that **Hyon** teaches **"said registered image stored in a storage portion different from a storage portion of storing the predetermined kind of character"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23) and "In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station, and the stores them, or downloads them from the Internet" (Paragraph 44). The examiner further notes that **Hyon** teaches **"at least one predetermined kind of character that is to be displayed directly adjacent to said registered image with respect to display data containing a character code, text attribute data, and said image code"** as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon...the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that **Hyon** teaches **"displaying said predetermined kind of character and said registered image simultaneously based on said transformed registered image"** as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by

manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon…the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

      Hyon does not explicitly teach:

D) said text attribute data containing <u>a size mark to be added to each said at least one directly adjacent character</u>;

E) transforming said registered image to be displayed according to said text attribute data;

H) by determining whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the registered image are not substantially the same, said display control portion makes the size of the <u>at least one directly adjacent character</u> and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data;

J) causing said display output portion to display a text containing <u>said at least one directly adjacent character and the registered image scaled to substantially the same size</u>.

      Baker, however, teaches **"said text attribute data containing <u>a size mark to be added to each said at least one directly adjacent character</u>"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40),

"**transforming said registered image to be displayed according to said text attribute data**" as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), "**by determining whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the registered image are not substantially the same, said display control portion makes the size of the <u>at least one directly adjacent character</u> and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data**" as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), and "**causing said display output portion to display a text containing <u>said at least one directly adjacent character and the registered image scaled to substantially the same size</u>**" as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker's** would have allowed **Hyon's** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Hyon and **Baker** do not explicitly teach:

D) said text attribute data containing <u>a style mark to be added to each said at least one directly adjacent character</u>;

G) so that said registered image is sandwiched between two parts of said text of said predetermined kind of character in a line;

I) modifying said registered image to include image data for a mark resembling said style make attribute data of said at least one directly adjacent character;

J) and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character.

Ostermann, however, teaches **"said text attribute data containing a style mark to be added to each said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and

presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), **"so that said registered image is sandwiched between two parts of said text of said predetermined kind of character in a line"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), **"<u>modifying said registered image to include image data for a mark resembling said style</u>**

make attribute data of said at least one directly adjacent character" as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), and **"and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined

emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61).

The examiner further notes that Figure 6 of **Ostermann** displays a selectable area 96 for users to insert emoticons directly via a mouse into a currently typed message. Moreover, **Ostermann** explicitly states that the style markings of an adjacent character are applied to an emoticon (See "the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 7, **Hyon** teaches a viewer program comprising:

A) storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user (Paragraphs 23, 25, and 44, Figure 2);

B) said registered image stored in a storage portion different from a storage portion of storing the predetermined kind of character (Paragraphs 23 and 44);

C) at least one predetermined kind of character that is to be displayed directly adjacent to said registered image with respect to display data containing a character code, text attribute data, and said image code (Paragraphs 21 and 41-42);

F) displaying said predetermined kind of character and said registered image simultaneously based on said transformed registered image (Paragraphs 21 and 41-42);

The examiner notes that **Hyon** teaches **"storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23), "storage 18 stores oriental or occidental emoticons according to the cultural area of a user" (Paragraph 25), and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons

stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that **Hyon** teaches **"said registered image stored in a storage portion different from a storage portion of storing the predetermined kind of character"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23) and "In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station, and the stores them, or downloads them from the Internet" (Paragraph 44). The examiner further notes that **Hyon** teaches **"at least one predetermined kind of character that is to be displayed directly adjacent to said registered image with respect to display data containing a character code, text attribute data, and said image code"** as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the

short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon…the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that **Hyon** teaches **"displaying said predetermined kind of character and said registered image simultaneously based on said transformed registered image"** as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon…the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

　　　　Hyon does not explicitly teach:

D) said text attribute data containing <u>a size mark to be added to each said at least one directly adjacent character</u>;

E) transforming said registered image to be displayed according to said text attribute data;

H) by determining whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the registered image are not substantially the same, said display control portion makes the size of the <u>at least one directly</u>

<u>adjacent character</u> and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data; J) causing said display output portion to display a text containing <u>said at least one directly adjacent character and the registered image scaled to substantially the same size</u>.

Baker, however, teaches **"said text attribute data containing <u>a size mark to be added to each said at least one directly adjacent character</u>"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), **"transforming said registered image to be displayed according to said text attribute data"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), **"by determining whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the registered image are not substantially the same, said display control portion makes the size of the <u>at least one directly adjacent character</u> and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), and **"causing said display output portion to display a text containing <u>said at least one directly adjacent character and the registered image scaled to substantially the same size</u>"** as "in order to accommodate the use of different size fonts in the mailbox display, means for

scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker's** would have allowed **Hyon's** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Hyon and **Baker** do not explicitly teach:

D) said text attribute data containing <u>a style mark to be added to each said at least one directly adjacent character</u>;

G) so that said registered image is sandwiched between two parts of said text of said predetermined kind of character in a line;

I) <u>modifying said registered image to include image data for a mark resembling said style make attribute data of said at least one directly adjacent character</u>;

J) <u>and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character</u>.

Ostermann, however, teaches **"said text attribute data containing <u>a style mark to be added to each said at least one directly adjacent character</u>"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert

the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), **"so that said registered image is sandwiched between two parts of said text of said predetermined kind of character in a line"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the

chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), **"modifying said registered image to include image data for a mark resembling said style make attribute data of said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the

underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), and **"and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the

animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61).

The examiner further notes that Figure 6 of **Ostermann** displays a selectable area 96 for users to insert emoticons directly via a mouse into a currently typed message. Moreover, **Ostermann** explicitly states that the style markings of an adjacent character are applied to an emoticon (See "the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 8, **Hyon** teaches a computer readable recording medium comprising:

A) storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user (Paragraphs 23, 25, and 44, Figure 2);

B) said registered image stored in a storage portion different from a storage portion of storing the predetermined kind of character (Paragraphs 23 and 44);

C) at least one predetermined kind of character that is to be displayed directly adjacent to said registered image with respect to display data containing a character code, text attribute data, and said image code (Paragraphs 21 and 41-42);

F) displaying said predetermined kind of character and said registered image simultaneously based on said transformed registered image (Paragraphs 21 and 41-42);

The examiner notes that **Hyon** teaches **"storing an image code for specifying said registered image and registered image data corresponding to said image code in a correlated manner according to registration processing by a user"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23), "storage 18 stores oriental or occidental emoticons according to the cultural area of a user" (Paragraph 25), and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that **Hyon** teaches **"said registered image stored in a storage portion different from a storage portion of storing the predetermined kind of character"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons"

(Paragraph 23) and "In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station, and the stores them, or downloads them from the Internet" (Paragraph 44). The examiner further notes that **Hyon** teaches **"at least one predetermined kind of character that is to be displayed directly adjacent to said registered image with respect to display data containing a character code, text attribute data, and said image code"** as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon…the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that **Hyon** teaches **"displaying said predetermined kind of character and said registered image simultaneously based on said transformed registered image"** as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21), "If the user selects "smile" in the display 6 by manipulating a left/right directional key, emoticons that belong to the group "smile" are displayed in a display 7. When the user chooses one of the "smile" emoticons " . " in the display 7, the selected emoticon is stored as part of the short message as shown in a display 8. Then, the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes" (Paragraph 41), and "After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon…the mobile terminal transmits the stored message" (Paragraph 42). The examiner further

notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

Hyon does not explicitly teach:

D) said text attribute data containing <u>a size mark to be added to each said at least one directly adjacent character</u>;

E) transforming said registered image to be displayed according to said text attribute data;

H) by determining whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the registered image are not substantially the same, said display control portion makes the size of the <u>at least one directly adjacent character</u> and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data;

J) causing said display output portion to display a text containing <u>said at least one directly adjacent character and the registered image scaled to substantially the same size</u>.

Baker, however, teaches **"said text attribute data containing <u>a size mark to be added to each said at least one directly adjacent character</u>"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), **"transforming said registered image to be displayed according to said text attribute data"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), **"by determining whether or not a size of <u>said at least one directly adjacent character</u> and a size of the registered image are substantially the same, when the size of <u>at least one directly adjacent character</u> and the size of the**

registered image are not substantially the same, said display control portion makes the size of the <u>at least one directly adjacent character</u> and the size of the registered image substantially the same by scaling up/down the size of the registered image based on the text attribute data" as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40), and **"causing said display output portion to display a text containing <u>said at least one directly adjacent character and the registered image scaled to substantially the same size</u>"** as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided…at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker's** would have allowed **Hyon's** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Hyon and **Baker** do not explicitly teach:

D) said text attribute data containing <u>a style mark to be added to each said at least one directly adjacent character</u>;

G) so that said registered image is sandwiched between two parts of said text of said predetermined kind of character in a line;

I) <u>modifying said registered image to include image data for a mark resembling said style make attribute data of said at least one directly adjacent character</u>;

J) <u>and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character</u>.

Ostermann, however, teaches **"said text attribute data containing <u>a style</u> <u>mark to be added to each said at least one directly adjacent character</u>"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), **"so that said registered image is sandwiched between two parts of said text of said predetermined kind of character in a line"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and

so forth. The predefined emoticons are represented either as icons or as text, such as
";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96.
The sender inserts an emoticon into a text message at the location of the cursor 102 by
clicking on one of the emoticon icons 100. The sender may also type in the desired
emoticon as text. Emoticon icons 96 save the sender from needing to type three keys,
such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a
winking eye or a icon representation of the characters ";-)" 100, or other information
indicating to the sender that clicking on that emoticon icon will insert the associated
emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and
"The sender can associate typed words with an emoticon by underlining, coloring,
highlighting, or by any other means. For example, the method may comprise providing
the sender an option to assign a color to the at least typed one word such that the
chosen emoticon begins to be presented by the animated entity to the recipient at the
first typed word with the assigned color and the chosen emoticon presentation by the
animated entity ends at the last typed word with the assigned color. In this case, in a
sentence such as "Hi John, :-) are you pleased that the stock market is up?" the
underlining represents the highlighting wherein the sender chooses to begin the smile at
the beginning of the word "are" and to continue the smile through the word "up". The
method comprises receiving the indicated duration of the emotion and presenting the
chosen duration of the emotion as the animated entity delivers the message. As
mentioned above, the highlighting can occur through coloring words, underlining words,
or some other means of presenting the emotion" (Column 11, lines 43-61), **"modifying
said registered image to include image data for a mark resembling said style
make attribute data of said at least one directly adjacent character"** as "The sender
may also insert emoticons 103 into the text of the message. The system includes
predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye
wink, and so forth. The predefined emoticons are represented either as icons or as text,
such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon
icons 96. The sender inserts an emoticon into a text message at the location of the
cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in

the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61), and **"and including the mark resembling the style mark attribute data in a position that is substantially continuous with the placement of the style mark in said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender

that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61).

The examiner further notes that Figure 6 of **Ostermann** displays a selectable area 96 for users to insert emoticons directly via a mouse into a currently typed message. Moreover, **Ostermann** explicitly states that the style markings of an adjacent character are applied to an emoticon (See "the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 11, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein said style mark is an underline said display control portion causes said display output portion to display the text containing said at least one directly adjacent character and the registered image including the mark resembling the underline in a position that is substantially continuous with the placement of the underline in said at least one directly adjacent character.

Ostermann, however, teaches **"wherein said style mark is an underline said display control portion causes said display output portion to display the text containing said at least one directly adjacent character and the registered image including the mark resembling the underline in a position that is substantially continuous with the placement of the underline in said at least one directly adjacent character"** as "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased

that the stock market is up?" the underlining represents the highlighting wherein the
sender chooses to begin the smile at the beginning of the word "are" and to continue
the smile through the word "up". The method comprises receiving the indicated duration
of the emotion and presenting the chosen duration of the emotion as the animated entity
delivers the message. As mentioned above, the highlighting can occur through coloring
words, underlining words, or some other means of presenting the emotion" (Column 11,
lines 43-61).

The examiner further notes that Figure 6 of **Ostermann** displays a selectable
area 96 for users to insert emoticons directly via a mouse into a currently typed
message. Moreover, **Ostermann** explicitly states that the style markings of an adjacent
character are applied to an emoticon (See "The sender can associate typed words with
an emoticon by underlining, coloring, highlighting, or by any other means. For example,
the method may comprise providing the sender an option to assign a color to the at
least typed one word such that the chosen emoticon begins to be presented by the
animated entity to the recipient at the first typed word with the assigned color and the
chosen emoticon presentation by the animated entity ends at the last typed word with
the assigned color").

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine the teachings of the cited references because teaching
Ostermann's would have allowed **Hyon's** and **Baker's** to provide a method to allow
the ability to insert a customized emoticon or specified image by a single button click, as
noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 13, **Hyon** further teaches a display device comprising:
A) wherein the first storage portion is a ROM (Paragraph 23); and
B) the second storage portion is a RAM (Paragraphs 23 and 44).

The examiner notes that **Hyon** teaches **"wherein the first storage portion is a
ROM"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM
(Random Access Memory) for storing programs and data, and a voice memory. The
storage 18 stores an operation program for inputting emoticons and a plurality of

emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that **Hyon** teaches **"the second storage portion is a RAM"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23) and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only).

Regarding claims 14-17, **Hyon** and **Baker** do not explicitly teach a display device, display method, viewer program, and computer-readable recording medium comprising:

A) wherein the text containing the predetermined kind of character and the registered image is used in a Hyper Text Markup Language document.

Ostermann, however, teaches **"wherein the text containing the predetermined kind of character and the registered image is used in a Hyper Text**

Markup Language document" as "FIG. 4(a) illustrates a high-bandwidth architecture 60 associated with the embodiments of the invention. The system 60 delivers a hyper-text mark-up language (HTML) page through the Internet 62 (connected to a web server, not shown but embodied in the Internet 62) to a client application 64. The HTML page (shown by way of example in FIG. 6) enables the sender to create a multi-media message. The client application may be, for example, a web browser such as Microsoft's Internet Explorer.RTM.. Other client applications include e-mail and instant messaging clients. The sender creates the multi-media message using the HTML page" (Column 4, lines 53-63).

The examiner notes that it is clear that **Ostermann's** method can use various computer font techniques to apply to sentences with emoticons, such as underlines and highlighters.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

8.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hyon** (U.S. PGPUB 2002/0077135) in view of **Baker** (U.S. Patent 6,546,417), and further in view of **Ostermann et al.** (U.S. Patent 6,990,452) as applied to claims 1, 4, 6-8, 11, and 13-17 above, and further in view of **Prouix et al.** (U.S. PGPUB 2002/0124019).

9.   Regarding claim 12, **Hyon** and **Baker** do not explicitly teach a display device comprising:

B) said display control portion causes said display output portion to display the text containing said at least one directly adjacent character and the registered image including the mark in a position that is substantially continuous with the placement of the line in said at least one directly adjacent character.

Ostermann, however, teaches "**said display control portion causes said display output portion to display the text containing said at least one directly adjacent character and the registered image including the mark in a position that**

is substantially continuous with the placement of the line in said at least one
directly adjacent character" as "The sender may also insert emoticons 103 into the
text of the message. The system includes predefined emoticons 96, such as ":-) " for a
smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined
emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6,
the window 80 includes a sample group of emoticon icons 96. The sender inserts an
emoticon into a text message at the location of the cursor 102 by clicking on one of the
emoticon icons 100. The sender may also type in the desired emoticon as text.
Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-"
and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon
representation of the characters ";-)" 100, or other information indicating to the sender
that clicking on that emoticon icon will insert the associated emotion 103 into the text at
the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate
typed words with an emoticon by underlining, coloring, highlighting, or by any other
means. For example, the method may comprise providing the sender an option to
assign a color to the at least typed one word such that the chosen emoticon begins to
be presented by the animated entity to the recipient at the first typed word with the
assigned color and the chosen emoticon presentation by the animated entity ends at the
last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-)
are you pleased that the stock market is up?" the underlining represents the highlighting
wherein the sender chooses to begin the smile at the beginning of the word "are" and to
continue the smile through the word "up". The method comprises receiving the indicated
duration of the emotion and presenting the chosen duration of the emotion as the
animated entity delivers the message. As mentioned above, the highlighting can occur
through coloring words, underlining words, or some other means of presenting the
emotion" (Column 11, lines 43-61).

The examiner further notes that Figure 6 of **Ostermann** displays a selectable
area 96 for users to insert emoticons directly via a mouse into a currently typed
message. Moreover, **Ostermann** explicitly states that the style markings of an adjacent
character are applied to an emoticon (See "The sender can associate typed words with

an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Hyon, **Baker**, and **Ostermann** do not explicitly teach:

A) wherein said style mark is a cancel line; and

B) resembling the cancel line.

Prouix, however, teaches **"wherein said style mark is a cancel line"** and **"resembling the cancel line"** as "The font type represents information about the style of the font. One embodiment has seven font type options: nochange, textbody, bold, italic, heading1, heading2 and heading. The text attributes represent information about the style of the text. One embodiment has six text attribute options: bold, italic, underline, strikethrough, outline and shadow" (Paragraph 49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Prouix's** would have allowed **Hyon's**, **Baker's**, and **Ostermann's** to provide a method to allow the ability to insert multiple style settings to documents, as noted by **Prouix** (Paragraph 21).

Response to Arguments

10.   Applicant's arguments filed on 08/05/2010 have been fully considered but they are not persuasive.

Applicants argue on page 11 that **"Images, unlike symbols, are not predefined, and thus are not provided with attributes as in text"**. However, the

examiner wishes to refer to Columns 8 and 11 of **Ostermann** which state "The sender may also insert emoticons 103 into the text of the message. The system includes predefined emoticons 96, such as ":-) " for a smile, "::-)" for a head nod, "*w*" for an eye wink, and so forth. The predefined emoticons are represented either as icons or as text, such as ";-)". As shown in FIG. 6, the window 80 includes a sample group of emoticon icons 96. The sender inserts an emoticon into a text message at the location of the cursor 102 by clicking on one of the emoticon icons 100. The sender may also type in the desired emoticon as text. Emoticon icons 96 save the sender from needing to type three keys, such as ":" and "-" and ")" for a smile. The icons 96 may be either a picture of, say, a winking eye or a icon representation of the characters ";-)" 100, or other information indicating to the sender that clicking on that emoticon icon will insert the associated emotion 103 into the text at the location of the cursor 102" (Column 8, lines 35-50) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color. In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emotion and presenting the chosen duration of the emotion as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61). The examiner further notes that Figure 6 of **Ostermann** displays a selectable area 96 for users to insert emoticons directly via a mouse into a currently typed message. Moreover, **Ostermann** explicitly states that the style markings of an adjacent character are applied to an emoticon (See "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example,

the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color").

Applicants argue on page 11 that **"the attributes of height and width for images do not coincide with the attribute size for text"**. However, the examiner wishes to refer to Column 8 of **Baker** which states "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40). The examiner further wishes to state that it is clear that **Baker** scales images to the size of a font of an adjacent text character.

Applicants argue on page 11 that **"the cited prior art, either alone or in combination, fail to disclose at least the feature recited in claim 1 as amended of, "said display control portion...adjacent character"**. However, the examiner wishes to state that it is clear that **Baker** scales the size of an image to the size of adjacent characters while **Ostermann** applies style marks to adjacent characters to a selectable emoticon image.

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,987,991 by **Nelson** on 17 January 2006. The subject matter disclosed therein is pertinent to that of claims 1, 4, 6-8, and 11-17 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. PGPUB 2002/0120653 by **Kraft et al.** on 29 August 2002. The subject matter disclosed therein is pertinent to that of claims 1, 4, 6-8, and 11-17 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. Patent 6,584,479 by **Chang et al.** on 24 June 2003. The subject matter disclosed therein is pertinent to that of claims 1, 4, 6-8, and 11-17 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. Patent 6,456,305 by **Qureshi et al.** on 24 September 2002. The subject matter disclosed therein is pertinent to that of claims 1, 4, 6-8, and 11-17 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. Patent 5,301,106 by **Hersum** on 05 April 1994. The subject matter disclosed therein is pertinent to that of claims 1, 4, 6-8, and 11-17 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

Article entitled "WD2000: Underlining Text Causes Picture to be Underlined" by **Microsoft**, dated 06 December 2000. The subject matter disclosed therein is pertinent to that of claims 1, 4, 6-8, and 11-17 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

Contact Information

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Mahesh Dwivedi
Patent Examiner

October 11, 2010

/Mahesh H Dwivedi/

Examiner, Art Unit 2168